

Denver Bio Grande RR  
South Roper Yd.



404060

JUN 10 1986

Ref: CHM-SR

Loretta Pickerell  
Utah Bureau of Solid and Hazardous Waste  
Utah Department of Health  
P.O. Box 16700  
Salt Lake City, Utah 84116-0700

Dear Loretta:

Below are comments on the 18 draft preliminary assessments (PA) and one draft site inspection (SI) that were submitted to me. The Highland Boy Smelter SI was returned to you at Wade Hansen's request prior to any review. The Kennecott Tailings SI has not yet been reviewed. My comments are summarized below:

✓ SITE INSPECTION-Bland Landfill - UTD980635932

General Comments:

1. Organic constituents should have been analyzed for on this landfill site especially when oily waste and pesticide containers were noted onsite.
2. When describing samples and locations, terminology such as "upgradient of the site" and "downgradient of the site" should be used.
3. Laboratory data sheets that show analytical results prefaced by the "less than" symbol indicate that the concentration for that parameter was below the detection limit. Tables illustrating analytical results, such as Tables 1, 2, and 3, should include the "less than" symbol as appropriate. This is particularly important when determining observed releases for the HRS.
4. All figures and tables should be referenced in the text of the narrative and the corresponding figure or table should immediately follow the reference.
5. The State should establish and follow a standard, consistent format for the site inspection reports, especially the narrative. All blanks on the SI form should be filled out as completely as possible. An "unknown" should only be used if every attempt has been made to collect the data, but it is not available.
6. The HRS ground water route score (150.00, based on potential) was high enough to obtain an overall score of 29.76. However, the question of whether the aquifer from which Magna municipal supply wells draw water must still be answered to substantiate this score.

7. Downgradient surface water samples should have been analyzed for organic constituents.
8. Justification for why no air sampling was conducted or considered necessary should be provided in the narrative.
9. Number the pages of both the narrative and the SI form.

Specific Comments (Narrative)

1. Page 1, Executive Summary - typographical error in the date.
2. Page 2, Background - the second sentence is run on and confusing.
3. Page 2, Environmental Setting - avoid making unsubstantiated general statements such as, "...an owl, a red fox, and abundant muskrat and pheasant signs were observed, indicating a healthy and active wildlife population in the area." Such a conclusion cannot be drawn from the limited observation of an SI.
4. Page 3, Waste Characterization - add "during" to the fourth sentence.
5. Page 3, Waste Characterization - restate why any hazardous waste may be present here.
6. Page 4, Sampling Results - the statement "...unacceptable condition of the south and north onsite wells" should be clarified.
7. Page 4, Sampling Results - ground water samples should be filtered in the field. If excessive sedimentation is prevalent, the filtering process will be time consuming but necessary to achieve usable ground water data.
8. Page 4, Sampling Results - typographical error in "Table".
9. Page 4, Conclusions and Recommendations - the draft HRS  $S_{gm}$  score should be mentioned here.
10. Page 5, Conclusions and Recommendations - change "...should be probably be..." to "...should probably be...".
11. Map should have a scale and a north arrow. Also, the boundaries and name of the site should be clearly illustrated.
12. A reference to Table 2 should be included in the narrative. On all tables, who collected this data and when was it collected?
13. The photographs should be dated.

Specific Comments (SI form)

1. Part 1, III, 05 - fill in or state "unknown".
2. Part 1, III, 13 - fill in or state "none".
3. Part 1, III, 17 - check now access was gained. — Access was gained to something.
4. Part 1, IV, 08 - fill in date.
5. Part 2, II, 02 - fill in or state "unknown".
6. Part 2, II - under IOC category, state "elevated arsenic in surface water and unfiltered ground water samples." Also, under HES category, state "elevated heavy metals in unfiltered ground water samples."
7. Part 2, IV - under substance name, list contaminants for which elevated concentrations were found in either surface water or groundwater samples. Provide category, CAS number, etc., for all contaminants listed. Delineate sample field number associated with each contaminant listed.
8. Part 3, II, A - change "Parlmer" to "Palmer". If ground water analytical data has been deemed unusable for HRS purposes as alluded to in the narrative, this should be noted in this section.
9. Part 3, II, B - analytical data summarized in Table 3 indicate elevated levels of only arsenic, barium, and iron in down gradient surface water samples.
- \*10. Part 3, II, G - the water levels of the Magna municipal supply wells should be stated and a statement correlating the drinking water aquifer with the sampled aquifer should be made. References should be cited.
11. Part 3, II, I - fill in population potentially affected.
12. Part 3, II, K - indicate which contaminants exceed drinking water standards.
13. Part 3, V, do not refer to the HRS package. The SI should stand alone as a complete document.
14. Part 5, III, 03 - fill in.
15. Part 5, III, 07 - fill in or state "unknown".
16. Part 5, III, 05 - information on the confining layer in the 10 to 100 foot depth interval should be noted here. References should be cited.

17. Part 5, III, 10 - check one.
18. Part 5, IV, 02 - check one.
19. Part 5, IV, 03 - enter soil pH.
20. Part 5, IV, 05 - fill in blank.
21. Part 5, VII - this reference is 15 years old. Have efforts been made to substantiate the data obtained from this reference?
22. Part 6, III - pH and specific conductance data should be collected, particularly for a site with inorganic contaminants.
23. Part 7, III - fill in or state "unknown".
24. Part 8, III - fill in or state "unknown".
25. Part 9 - fill in or state "unknown".
26. Part 10, II - fill in or state "no past response activities".

#### Specific Comments (HRS)

1. Fill in the general description of the facility on the cover sheet.
2. The surface water route score sheet was left out of the package.
3. Reference 4 must include a literature citation for it to be used as HRS documentation.

#### PRELIMINARY ASSESSMENTS - General Comments

1. It is not always clear whether or not a site visit was conducted prior to completing the PA form. With the exception of RCRA-regulated facilities where recent inspections have been conducted by State personnel, a windshield inspection, at a minimum, should be conducted at each site. It is preferable to arrange for site access and an interview with the owner and/or operator, if possible.
2. Every blank on the PA form should be filled in with the appropriate information. An "unknown" should only be used if every effort has been made to collect the information, but it is not available.
3. The "population potentially affected" line in Part 3 is very important. By researching the numbers of people potentially affected by a particular contaminant migration route, it will be easier to evaluate the likelihood for the site to receive a significant HRS score.

4. A north arrow and scale should always be provided on each map. Also, the boundaries and name of the site should be clearly illustrated.
5. Numerous spelling and typographical errors were found throughout the reports. The errors should be corrected prior to submitting final PA reports.
6. All "X" marks should be consistently placed in the same location (i.e., in front of the item marked) to avoid confusion.
7. Please make an effort to keep the pages in order.
8. Preliminary assessments should not be submitted without a CERCLIS number.
9. Please take care to ensure that sites ineligible for pre-remedial work submitted as PAs or Sis. Some of these PAs are very close to triggering the exclusions, and one, in fact, is not eligible under the MSCA.

✓ American Barrel - UTD980667240

1. Please do not use the term "bum" in the narrative.
2. Part 3, II, B - what is the potential for contaminants to move into local surface water bodies? Are there any permanent surface water bodies in the vicinity of the site?
3. Part 3, II, G - does Salt Lake City utilize ground water as a drinking water source? Are any municipal supply wells or private wells located in the area?

✓ David J. Joseph Company - UTD018686709

- ✓ 1. Part 1, II, 02 - fill in.
- ✓ 2. Part 1, III, 03, 04, 07-12 - fill in.
- ✓ 3. Part 1, IV, 04 - who originally brought up the concern over the radioactive waste residues at the site?
- ✓ 4. Part 1, IV, 05 - what is the source of this information? Was a site visit conducted to back it up? These statements should be substantiated.
- ✓ 5. The "no further action" determination is valid only if this is based on a recent site visit and can be substantiated.

✓ Denver and Rio Grande Railroad, Roper Yard South - No CERCLIS Number

1. Has the State considered splitting samples with Morrison Knudsen? Are the ground water samples being collected from the shallow aquifer? Is there evidence of any waste spills on the land surface? Are there any visible signs of unauthorized dumping or is landfilled material adequately covered? How is the statement that no surface water at the site has been contaminated substantiated?
- ✓ 2. Map should have a north arrow and site boundaries clearly delineated.
- ✓ 3. The preliminary assessment form should not be submitted without a CERCLIS number.
- ✓ 4. Part 3, II, A - fill in population potentially affected.
- ✓ 5. Part 3, II, B - fill in population potentially affected.
- ✓ 6. Part 3, II, C - describe whether or not there is a potential for air contamination based on conditions at the site.
7. Part 3, II, G - how deep are these municipal supply wells?
- ✓ 8. Part 3, II, H - is this potential or observed?
9. The State recommends a low priority for inspection based on the fact that D&RG Railroad is currently investigating ground water in the North area. The direction of ground water flow is north to northwest, however, and the Vitro Tailings site lies between the South site and the North site. Therefore, information gathered for the North site will not be applicable. Depending on target populations, an SI may be required.

Normally, sampling such as that done at this site is not done at the PA stage. In the future, please limit sampling during a PA; if sampling is required, it is usually more appropriate to do this during a site inspection.

✓ Ekotek Inc. - UTD093119196

Page A-16 of the State Participation in the Superfund Remedial Program guidance book specifically prohibits pre-remedial work at RCRA facilities seeking Part B permits. It is stated in the narrative that this site is seeking such a permit; therefore this site is not eligible for PA/SI work under the HSCA.

✓ Enercor - UTD980959306

1. Part 1, II, 05 - fill in.
2. Part 1, IV, 05 - is this site a candidate for a removal action?
3. Part 2, II - there is a discrepancy between the number of drums under "Waste Quantity" and "Waste Type".

4. Part 3, II, D - need to substantiate the statement that waste products were poured directly on the ground.
5. Part 3, II, H - fill in population potentially affected.
6. Part 3, II, F - this statement should be more descriptive, e.g., what type of surface impoundment, what are contents, etc. A RCRA permit is only required if the material contained is considered hazardous.
7. Part 3, III - how was the 300 person figure calculated?
8. Part 3, II, A - fill in population potentially affected. Has it been demonstrated that contaminants are present in the shallow ground water as stated in the last sentence? Are data available?
9. Part 3, II, B - fill population potentially affected. What are the downgradient uses of the Salt Lake City sewage canal?
10. Part 3, II, F - fill in area potentially affected.
11. Part 3, II, G - fill in population potentially affected. How deep is the deep aquifer? Is the information available on the composition and thickness for the confining layer between aquifers?
12. A high priority for inspection has not been substantiated. No information has been provided which indicates the oil is of a hazardous nature. Ground water used as drinking water supplies has been deemed unthreatened. Use of surface water downgradient of the site has not been adequately researched. Contamination of the air route has not been discussed.

✓ Golden Eagle Oil Refinery - UT0070534625

- ✓ 1. Part 1, II, 10 - fill in.
- ✓ 2. Part 1, III, 07, 08, 11 - fill in.
- ✓ 3. Part 1, IV, 02 - check one.
- ✓ 4. Part 1, IV, 05 - no hazardous conditions were found by whom? Was there a site visit, telecon, conversations with State RCRA personnel, etc.?

✓ UTE Business Communication Systems - UT0098810989

1. Wording such as "...apparently no waste was treated or disposed of on-site" tends to indicate that this is unverified information. State the back-up sources for this information.



✓ Highland Boy Selter - UTD980957598

1. Part 1, II, 07-12 - fill in or state "unknown."
- ✓ 2. Part 1, IV, 05 - if the site is to be developed as a subdivision, there is a direct contact threat which should be noted here.
- ✓ 3. Part 3, II, J - check observed, potential, or alleged.
4. Part 3, II, H - what is the potential for wind deposition of soil material concentrated with heavy metals and arsenic on nearby property?
5. Part 3, III - fill in, including potential population from subdivision.
- ✓ 6. Part 3, II, A - fill in population potentially affected. What is the depth to ground water in the area? Describe the local ground water hydrology.
- ✓ 7. Part 3, II, B - fill in. Are there any waterways near the site draining toward the Jordan River?
- ✓ 8. Part 3, II, C - fill in population potentially affected.
- ✓ 9. Part 3, II, E - check observed, potential, or alleged. Fill in population potentially affected. Are motorcyclists exposed to inorganic contaminants in dust while using the site?
- ~~10. Part 3, II, A - fill in population potentially affected. What is the depth?~~
- ✓ 13. Part 3, II, F - fill in population potentially affected.
- ✓ 14. Part 3, II, G - all wells within a three mile radius of the site should be addressed, not just those which are downgradient.
- ✓ 15. Part 3, II, I - fill in population potentially affected.

Husky Oil Company - UTD046267127

- ✓ 1. All wells within a three mile radius of the site should be addressed, not just those which are downgradient.
- ✓ 2. Clarify the second to the last sentence of the narrative beginning with, "it is recommended..."
- ✓ 3. Part 1, II, 10 - fill in.



4. Part 1, II, 07-12 - fill in or state "unknown".
5. Part 1, V, - this is inconsistent with the narrative.
6. Part 2, II, III - it is difficult to tell which items are checked.
7. Part 2, III - who collected the data shown here? Are these data for soil or water samples? Has any monitoring of organic constituents been conducted?
8. Part 3, II, M - fill in population potentially affected. Describe types of waste containment onsite.
9. Part 3, II, A - fill in population potentially affected.
10. Part 3, II, B - fill in population potentially affected.
11. Part 3, II, F - fill in area potentially affected.
12. Part 3, II, G - more research is required to fill in this section completely. More emphasis should be given, particularly when shallow ground water contamination is suspected.

Lark Tailings - No CERCLIS Number (Note - this is one of the Kennecott related sites that is being held until further discussion)

1. Part 1, II, 09 - fill in.
2. Part 1, II, 10 - describe directions to the site via public roads.
3. Part 1, III, 07-12 - fill in or state "unknown".
4. Part 1, VI, 08 - fill in.
5. Part 2, II, 01 - check "powder, fines".
6. Part 2, II, 03 - check "soluble".
7. Part 2, III - arsenic should be listed under 10C. The acid listed should be  $H_2SO_4$ .
8. Part 3, II, J - this statement is vague. Please clarify.
9. Part 3, II, K - "varmints" is not an appropriate terminology for this form.
10. Part 3, II, N - fill in population potentially affected.
11. Part 3, II, A - describe in more detail which groundwater is being contaminated. What specific contaminants were identified?

- ✓ 12. Part 3, II, B - did Kennecott collect and analyze surface water samples? Are these data available? If so, they should be included and discussed.
- ✓ 13. Part 3, II, F - what are the units for area potentially affected. How many acres are actually covered by tailings material?

✓ Mackay Landfill - JTD 980957906

- 1. Has a site visit been conducted? Were signs of hazardous materials observed?
- 2. Part 1, II, 05, 07, 08 - fill in.
- ✓ 3. Part 1, III - the narrative states that Mackay and Swedin purchased the property in 1971. Are they not the current owners?
- ✓ 4. Part 3, II, J - this statement is not complete. Is there some reason to believe toxic contaminants are onsite?
- ✓ 5. Part 3, II, K - see #4.
- ✓ 6. Part 3, II, L - see #4.
- ✓ 7. Part 3, II, M - fill in population potentially affected.
- ✓ 8. Part 3, III - fill in.
- ✓ 9. Part 3, II, A - fill in population potentially affected. At what depth do local drinking water and irrigation wells tap the ground water?
- ✓ 10. Part 3, II, B - fill in population potentially affected. Is water diverted from Kersey or Lee Creeks for drinking water or irrigation?
- ✓ 11. Part 3, II, C - fill in population potentially affected (within a 4 miles radius of the site).
- ✓ 12. Part 3, II, E - fill in population potentially affected.
- ✓ 13. Part 3, II, F - fill in area potentially affected.
- ✓ 14. Part 3, II, G - fill in population potentially affected. At what depth do local drinking water and irrigation wells tap the ground water?
- ✓ 15. Part 3, II, H - fill in workers potentially affected.
- ✓ 16. The State recommends a medium priority for site inspection. Based on data given here, this does not appear to be an appropriate rating. There is no evidence of hazardous material onsite and target populations have not been evaluated.

✓ State Motorcycle Park - No CERCLIS Number (Note: This is one of the Kennecott related sites that is being held until further discussion)

1. how many samples were collected during Kennecott's study? Show their locations on the map. How many acres are actually covered by the tailings material?
- ✓ 2. Part 1, II, 02, 05, 05 - fill in.
- ✓ 3. Part 1, II, 10 - described directions to the site via public roads.
- ✓ 4. Part 1, III, 07-12 - fill in or state "unknown".
- ✓ 5. Part 1, IV, 05 - who reported dust blowing from the site?
- ✓ 6. Part 1, VI, 03 - fill in.
- ✓ 7. Part 2, II, 01 - check "slurry".
- ✓ 8. Part 2, II, 03 - check "toxic", "persistent", "soluble".
- ✓ 9. Part 3, II, H - fill in population potentially affected. Are there any signs of run off from the site?
- ✓ 10. Part 3, II, d - describe the routes of contaminant migration which might contribute to crop damage.
- ✓ 11. Part 3, II, A - describe the general ground water use in the area. How was the 600 people figure calculated.
- ✓ 12. Part 3, II, B - What are the down gradient uses of Midas and Copper Creeks? What are the uses of the reservoir shown downgradient on the map. On what is the 2800 potentially affected people based?
- ✓ 13. Part 3, II, C - fill in population potentially affected. By whom has this blowing dust been observed?
- ✓ 14. Part 3, II, E - fill in population potentially affected. Are motorcyclists being exposed to airborne contaminants in dust while using the area?

Helco Company - UT0000690859

- ✓ 1. Is the statement "...there appears to be no hazards present..." based on a site visit?
- ✓ 2. Part 1, II, 06, 10 - fill in.
- ✓ 3. Part 1, III, 01-05 - fill in or state "unknown".
- ✓ 4. Part 3, II, 13 - check one.
5. Part 2, II, 02 - estimate the waste quantity at the site.

North Area Refuse Disposal - UTD980514210

- ✓ 1. Substantiate the statement "...small amounts from household wastes and small quantity wastes are probably received."
- ✓ 2. Part 1, II, 07, 08 - fill in.
- ✓ 3. Part 1, IV, 04 - substantiate the statement that wastes are "smuggled" into the landfill. How and by whom is this being done?
- ✓ 4. Part 3, II, J - this statement needs to be substantiated.
- ✓ 5. Part 3, II, K - see #4.
- ✓ 6. Part 3, II, L - see #4.
- ✓ 7. Part 3, II, M - fill in population potentially affected.
- ✓ 8. Part 3, II, A - fill in population potentially affected. Second sentence should state "Due to communication in the hydrogeologic system..." How many people are served by this municipal well?
- ✓ 9. Part 3, II, B - fill in population potentially affected. Are any streams, irrigation ditches, etc., nearby?
- ✓ 10. Part 3, II, C - fill in population potentially affected.
- ✓ 11. Part 3, II, D - fill in population potentially affected.
- ✓ 12. Part 3, II, E - fill in population potentially affected.
- ✓ 13. Part 3, II, F - fill in area potentially affected.
- ✓ 14. Part 3, II, G - fill in population potentially affected.
- ✓ 15. Part 3, II, H - fill in population potentially affected.

Ogden Nature Center - UTD128394277

1. Is the discharge from the cement plant covered by a NPDES permit? If there is reason to believe the cement plant is discharging unpermitted hazardous waste, a PA should be performed for the cement plant rather than the nature center. Is there any information available from DDO on the type of activities associated with this property during its ownership?
2. Clarify the statement beginning "DDO is currently on the NPL..."
3. Part 1, II, 07, 08 - fill in.
4. Part 3, II, M - fill in population potentially affected.
5. Part 3, II, O - parking lot run off, gutters, and roads are not considered to be a hazardous waste.

6. Part 3, II, P - does Amcor - cement have an NPDES permit for their waste water pipe?
7. Part 3, III - fill in.
8. Part 3, II, A - fill in population (number) potentially affected.
9. Part 3, II, B - fill in population potentially affected.
10. Part 3, II, F - fill in area potentially affected.
11. Part 3, II, H - fill in population potentially affected.
12. Part 3, II, I - fill in population potentially affected.
13. The State recommends a high priority for a site. Based on the information in this report, this recommendation is not substantiated. More information is needed on types of waste and target populations.

Salt Lake City/County Landfill - UTD980952816 -7

- ✓ 1. What types of hazardous wastes have been accepted by the landfill? Who are the small quantity generators?
- ✓ 2. Part 1, IV - state the types of small quantity generators.
- ✓ 3. Part 2, II, 02 - fill in or state "unknown".
- ✓ 4. Part 3, II, A - arsenic and cadmium are high in some of the groundwater samples. To demonstrate an observed release, an off-site background ground water sample from the same aquifer must also be collected and analyzed.
- ✓ 5. Part 3, II, B - fill in population potentially affected. Show read "sediment samples taken from Lee Creek show arsenic and lead concentrations to be three to four times greater than background concentrations." What are the potential downgradient uses of Lee Creek?
- ✓ 6. Part 3, II, I - fill in population potentially affected.
- ✓ 7. Part 3, II, M - fill in population potentially affected.
- ✓ 8. Samples should have been analyzed for organic constituents.
- ✓ 9. Although Magna municipal wells are located within two miles of the site and are considered threatened, no information on types of waste present onsite has been provided. Some indication of hazardous materials associated with the site must be provided in order to justify an SI.

Trammel Crow Distribution - UTD000710806

- ✓ 1. The statement in the narrative "Trammel Crow is a RCRA-regulated generator" is contradicted by the statement in Part 1, description of potential hazard, "Trammel Crow is a warehouse only. They did not manufacture anything." Please clarify this.
- ✓ 2. Part 1, II, 10 - fill in.
- ✓ 3. Part 1, II, 07-13 - fill in.
4. The second page of Part 1 was not submitted.
5. It is unclear whether a site visit was conducted to verify clean-up of spilled materials. A site visit is necessary to justify a no further action recommendation.

Utah State University - UTD000551653

- ✓ 1. Part 1, II, 10 - describe directions to the site via public roads.
- ✓ 2. Part 1, III, 01-06, 13 - fill in.
- ✓ 3. Part 1, IV, 03 - fill in.
- ✓ 4. Part 1, IV, 05 - by whom were "no hazardous conditions found"?
- ✓ 5. The second page of Part 1 was not submitted.

Please resubmit the SI and PAs with the corrections. If you have any questions regarding my comments, please call me at (303) 293-1532.

Sincerely,

Kelcey Yarbrough Land  
Remedial Project Manager

KLand:#1179N:6/5/86:ta:plp